

National Partnership for Environmental Priorities (NPEP) Bulletin

Spring, 2006

Welcome to the latest edition of the NPEP Bulletin. The NPEP Bulletin will be delivered to you quarterly to keep you informed of the latest NPEP and Waste Minimization news and events. Each issue will have a different theme. This Issue: Greening Facility Management. We distribute the Bulletin electronically in order to minimize waste, conserve resources, and promote the "Paperless Office."

Join NPEP Today

Interested in Waste Min? Want to improve your bottom line while helping the environment? NPEP encourages public and private organizations to form voluntary partnerships with EPA to reduce the use and or release of any of 31 Priority Chemicals (PCs). Enroll today: www.epa.gov/minimize/partnership.htm Read more about PCs at www.epa.gov/minimize/chemlist.htm



Contact the editors with your questions, events, articles, ideas, comments, and suggestions. We want to hear from you. Send us your thoughts and contributions today via email or our comments and questions form at www.epa.gov/minimize/contactus.htm

Upcoming Events:

- June 20 23: 99th Air and Waste Management Association Annual Conference and Exhibition
- June 27 30: EPA 2006 Community Involvement Conference and Training
- August 6 9: Energy 2006
- August 6 11: Mercury 2006. Conference on Mercury as a Global Pollutant

Send us your event today. Visit the Waste Min Calendar at www.epa.gov/minimize/calendar.htm

Disclaimer: The mention of any company, product, or process in this publication does not constitute or imply endorsement by the U.S. Environmental Protection Agency.

NPEP Welcomes Facility Management Companies



Jim Berlow, Director, Hazardous Waste Minimization and Management Division, presents enrollment plaque to William A. Rodgers, Jr., President and CEO of EMCOR Facilities Services, Inc.

NPEP recently welcomed two facility management companies committed to reducing mercury. EMCOR Facilities Services, Inc., Arlington, Virginia, is developing a comprehensive mercury recycling program for 15 of the 250 facilities they manage in the D.C. area. Mercury-containing devices, including thermostats and spent lamps, will be recycled. In addition, facility representatives and owners will be educated about mercury-containing products and how to manage them. Dave Downey, Director of Operations, notes that while many of the facilities operate on tight budgets, "So far we have been fairly successful educating them to fund these programs."

On March 10, Jim Berlow, Director, Hazardous Waste Minimization and Management Division, presented an enrollment plaque to William A. Rodgers, Jr., President and CEO of EMCOR Facilities Services, Inc., at a ceremony held during their national meeting in Arlington.

In April, NPEP welcomed a second facility management company found in Region 3. Trammell Crow Company, Washington, D.C., is also developing a comprehensive mercury recycling program for the 270 facilities they manage. Mercury-containing devices, including thermostats and spent lamps, will be recycled and tenants, vendors, and contractors will be educated about mercury-containing products and how to manage them.

See related mercury story, page 2.



Waste Min News

- Lean Toolkit available. Get your Lean and Environment Toolkit now at www.epa.gov/lean/toolkit
- National Priority Chemical Trends Report Available Online.

Read summary pages or download the Trends Report now at www.epa.gov/minimize/trends.htm

New Partner Spotlight

Region 1

Partner: M/A-COM, Inc.
Location: Lowell, Massachusetts
Targeted Chemicals: Lead, Chromium

Region 2

Partner: Anderson Instrument

Company

Location: Fultonville, New York **Targeted Chemical:** Mercury

Partner: Caribe General Electric Location: Anasco, Puerto Rico Targeted Chemical: Lead

Partner: Carribean Electroplating, Inc. Location: Bayamon, Puerto Rico Targeted Chemical: Lead

Region 3

Partner: EMCOR Facilities Services,

Inc

Location: Arlington, Virginia **Targeted Chemical:** Mercury

Partner: Sony Electronics Inc. Location: Mt. Pleasant, Pennsylvania Targeted Chemical: Lead

Partner: St. Luke's Hospital Location: Bluefield, West Virginia Targeted Chemical: Mercury

Partner: Trammell Crow Company Location: Washington, D.C.
Targeted Chemical: Mercury

Region 4

Partner: Modine Manufacturing

Company

Location: Jackson, Mississippi Targeted Chemical: Lead

Region 5

Partner: Federal-Mogul Location: Chicago, Illinois Targeted Chemical: Lead

Region 6

Partner: Precoat Metals division Sequa

Coatings Corporation **Location:** Houston, Texas

Targeted Chemical: Naphthalene

Read about all of our NPEP partners: www.epa.gov/minimize/partners.htm

Removing Mercury-Containing Equipment from Your Facility

NPEP's Mercury Challenge promotes the voluntary, systematic elimination of mercury-containing equipment from industrial sites. Mercury is a highly toxic chemical and is one of 31 Priority Chemicals (PCs) EPA has targeted for reduction. Whether you take the Mercury Challenge or not, removing mercury-containing equipment from your facility is a good way to protect the environment and your employees. Many NPEP partners, including Brookhaven National Laboratory, Consumers Energy, Sentara: Williamsburg Community Hospital, and U.S. Postal Service: Northeast Area are engaged in waste min projects to remove or recycle mercury-containing equipment.

NPEP partner Bowling Green State University (BGSU) operates an elemental mercury collection and reclamation program, collecting and recycling mercury and mercury-containing devices. Dave Heinlen, Safety and Health coordinator, invites other NPEP partners to contact him about sending mercury/mercury-containing equipment to the collection center. Visit the collection center website at

bgsu.edu/offices/envhs/mercury.htm and call Dave at (419) 372-2173.

The Postal Service (USPS) has established contracts to recycle mercury-bearing fluorescent bulbs. As part of its efforts, USPS developed new containers that reduce bulb breakage. USPS has won three Governor's Awards for this project. Terry Grover, Environmental Compliance Specialist, reports that finding a vendor to recycle the bulbs was easy because of his past experience. Terry advises, "Contact NEWMOA if you don't have a vendor in mind." You can visit NEWMOA, the Northeast Waste Management Officials Association, at www.newmoa.org

Brookhaven National Lab (BNL), a Department of Energy research laboratory, has focused on mercury reduction for the past four years and has eliminated about 185 pounds, including over 450 thermometers. George Goode, Manager, Environmental and Waste Management Division, states that although thermometers may seem innocuous, they are often used near laboratory sinks and, if broken, the mercury can find a pathway to the environment. George adds that the lab used to experience one or two expensive and disruptive mercury spills a year but now it has been more than a year since the last spill. The cost of BNL's mercury reduction project is small compared to the costs of environmental remediation that can result from mercury contamination. BNL recently completed a major remediation of the Peconic River, contaminated with mercury from past practices. The site now has an ISO 14001 Environmental Management System (EMS), implementing proactive environmental improvements to prevent future impacts.

Removing mercury-containing equipment from your facility is simple. First, identify the equipment. Next, dispose of it safely through an approved recycler and replace it with mercury-free alternatives. Finally, avoid purchasing new mercury-containing equipment.

Following are some types of mercurycontaining equipment you may find at your facility.

- Aquastats, Pressurestats, and Firestats
- Barometers
- Batteries
- Counterweights
- DC Watt-Hour Meters
- Flame Sensors
- Gas Regulators
- Lamps/Bulbs
- Manometers and Vaccuum Guages
- Permeters
- Ring Balances
- Switches and Relays

Following are some mercury-free alternatives for your switches, relays and thermostats.

- Digital, Hybrid, and Light Sensing Heat Thermostats
- Hard Contact, Open Contact Magnetic Snap, Sealed Magnetic Snap, and Steel Ball Switches
- Non-Mercury Mechanical and Solid State Relays
- Photoelectric sensors
- Nontoxic Liquid Metal Alloys

Mercury Challenge:

www.epa.gov/minimize/mercchall.htm Mercury and Removing Mercury:

www.epa.gov/mercury **EMS:** www.epa.gov/ems

Recycling Nickel -Cadmium Batteries

Cadmium and cadmium compounds comprise up to 50 percent of the weight of a nickel-cadmium (Ni-Cd) battery. Cadmium, an extremely toxic metal, is one of 31 Priority Chemicals (PCs) EPA has targeted for reduction. Because cadmium is so toxic, it is essential to recycle all Ni-Cd batteries.

Start your battery recycling program by visiting the Rechargeable Battery Recycling Corporation (RBRC) at www.rbrc.org. RBRC is a non-profit public service organization dedicated to recycling used rechargeable batteries and old cell phones. It offers recycling plans for businesses, public agencies, retailers, and communities. RBRC provides collection materials and pays recycling costs.

Two NPEP partners, International Truck and Engine Corporation and Smart Modular Technologies, recycle their Ni-Cd batteries. International sends theirs to RBRC. Terri Sexton, Regional Environmental Coordinator, reports that this service is free except for shipping if you sort the batteries yourself. Terri adds that she likes this service because. "It cuts out the middleman. Instead of shipping the batteries to a waste vendor, we ship them directly to the recycling vendor. We're also saving money and we don't have to report the batteries as hazardous waste anymore." International saves about 85 cents a pound by recycling their Ni-Cd batteries.

In addition to recycling your Ni-Cd batteries, here are some steps you can take to reduce battery waste:

- Replace Ni-Cd batteries with rechargeable alkaline, nickel-metal hydride, or lithium-ion batteries. Alkaline batteries are not considered hazardous waste. Nickel-metal hydride and lithium-ion batteries are less toxic and last longer than Ni-Cd batteries. All three types can also be recycled.
- Turn off battery-powered equipment when not in use.
- Remove batteries from equipment if it will not be used for extended periods.
- Purchase only the number of batteries you know you will need during the next six months.



Tire weights are clipped to the wheel rims of every automobile in the U.S. in order to balance the tires. Most tire weights are 95% lead. Lead is a highly toxic chemical and, is one of 31 Priority Chemicals (PCs) EPA has targeted for reduction. Tire weights often fall off and rapidly degrade into airborne dust, contaminating soil and groundwater with lead. Sometimes people use lead tire weights to make fishing sinkers and bullets, etc. Every year in the U.S., about 50 million pounds of lead is used to manufacture lead tire weights and over 5,000 tons of lead tire weights ends up on our roads.

Lead is not essential for properly functioning tire weights, so the solution to this problem is simple: replace leaded tire weights with lead-free alternatives. The most viable options include steel, zinc, and ZAMA (an alloy of zinc, aluminum, and copper).

Paul Grigsby, Lead Transportation Specialist in EPA's Office of Administrative Services, recently oversaw the retrofitting of EPA's Headquarters fleet with zinc tire weights. He reports that the weights cost one dollar each and that two vendors were employed, the weight manufacturer and a service vendor who replaced the weights. Thirteen vehicles were fitted with new weights at a cost of \$80 each. It took two weeks to replace the weights without disrupting vehicle service. Paul says that when you compare the cost to the environmental impact of the project. it was worth it. He adds, "If we could get the entire federal government to do this, the environmental benefit would be huge."

Currently, lead-free weights are only available from manufacturers. Visit *www.leadfreewheels.org* for more information.

Read more about lead at www.epa.gov/minimize/chemlist.htm Read more about lead tire weights at www.epa.gov/minimize/leadtire.htm

GM Partners with School District in CMS/RM Pilot

Throughout the U.S., K-12 school districts struggle to find cost-effective, long-term, comprehensive solutions to their chemical and waste management problems. Inspired by industry's success with the servicizing models Chemical Management Services (CMS) and Resource Management (RM), EPA recently supported a revolutionary pilot program combining CMS and RM to improve chemical and waste management in K-12 schools.

The servicizing approach changes the relationship between a customer and supplier from one where profit is based on quantity of product sold to one based on quality of services provided. When General Motors learned that EPA wanted to test the servicizing approach in a school district, they stepped forward with a willing candidate, the Lansing School District in Michigan. The goal was to use the suppliers and their expertise to improve chemical and waste management without placing additional burdens on teachers and other school personnel. GM has extensive experience with the servicizing model and was able to offer technical assistance. GM's support was a critical part of this successful pilot that led to the first CMS/RM contract ever issued and also stimulated service provider interest in the K-12 school sector market.

We encourage other organizations familiar with the servicizing approach to partner with school districts in their community. A step-by-step workbook based on the Lansing Public School District CMS/RM Pilot is being created to assist interested organizations. By offering your support and /or technical expertise, you can help a local school implement a program that creates a healthier school environment and contributes to enhanced learning while reducing costs. To learn more about this effort, contact Priscilla Halloran at halloran.priscilla@epa.gov or (703) 308-8802.

Read more about CMS at www.epa.gov/minimize/cms.htm

Read more about RM at www.epa.gov/wastewise/wrr/rm.htm

More Ways to Green Your Facility

• Buy Recycled:

www.epa.gov/epaoswer/non-hw/procure

• Coal Combustion Products

Partnership ($\mathbb{C}^2\mathbf{P}^2$): www.epa.gov/c2p2

• eCycling: www.epa.gov/ecycling

• Environmentally Preferred Purchasing: www.epa.gov/epp

• Green Buildings:

www.epa.gov/greenbuilding

• Green Landscaping: www.epa.gov/GreenScapes

• Green Suppliers Network: www.greensuppliers.gov

• Hazardous Waste Recycling: www.epa.gov/epaoswer/hazwaste/recycle/hazrecyc.htm

• **Product Stewardship:** www.epa.gov/epr

• Recyclable Commodities and Waste

Exchanges: www.epa.gov/jtr
• Voluntary Partnership Programs:

www.epa.gov/partners2

•WasteWise: www.epa.gov/wastewise

EPA Achieves 100% Green Power at Headquarters Facilities

Green power is energy generated from renewable sources such as wind and landfill gas. Using green power results in few to zero emissions. EPA recently achieved 100% green power for its headquarters facilities and is now the highest percentage green power user among all major federal agencies.

This success is the culmination of a multi-year effort involving several purchases of Renewable Energy Certificates, also known as Green Tags. These certificates are tradable and allow EPA to completely offset its estimated headquarters electrical power needs. The green power associated with EPA's most recent Green Tags purchase was generated from new wind power facilities located in Nebraska, Wyoming, Minnesota, and Oklahoma.

Nationally, EPA offsets approximately 88% of its electrical consumption through similar green power purchases.

To learn more about green power and Green Power Partnerships, visit www.epa.gov/greenpower



NPEP Partner Update

Federal Mogul, Boyertown, Accepted to Performance Track Program

Federal-Mogul (Boyertown, PA) has been an NPEP partner since July, 2004 and received an NPEP Achievement Award in October for eliminating 19,000 pounds of lead by changing to a non-leaded solder in its manufacturing process. Federal-Mogul recently joined EPA's National Environmental Performance Track Program and has committed to four environmental improvements over the next three years, including reducing hazardous waste generation and the amount of hazardous materials used.

Performance Track is a voluntary partnership program that acknowledges top environmental performance. Being an NPEP partner is a solid first step toward Performance Track membership. The new National Challenge Commitment to reduce priority chemicals offers NPEP partners the potential benefit of considering their pledges to reduce priority chemicals as satisfying two of the four commitments necessary to join Performance Track. Visit Performance Track at www.epa.gov/performancetrack

NPEP Mercury Successes

To date, twenty-six NPEP partners have achieved their enrollment goals. Our latest success stories come from Anderson Instrument Company, Inc., and Consumers Energy. Anderson, in Fultonville, New York, has completely ceased production of mercury in glass thermometers, eliminating 500 pounds of mercury from its production process.

Consumers Energy is a combination natural gas and electricity utility headquartered in Jackson, Michigan. Consumers eliminated 103 pounds of mercury at their facilities by reducing both elemental mercury and mercury-containing equipment. Consumers plans similar reductions in the future.

Director's Corner



Jim Berlow,

Director, Hazardous Waste Minimization and Management Division

We all work in facilities that produce waste. Even small amounts of hazardous chemicals can be toxic to us and our environment. When we add the waste our facilities produce together, the total volume can be significant.

Every hazardous chemical volume presents an opportunity for reduction. We can achieve those reductions through environmentally preferred purchasing and proven waste management and waste minimization techniques.

We applaud our new facility management partners for joining NPEP and committing to reduce the presence of hazardous chemicals in the buildings they manage. Their membership reminds us that priority chemical reductions can be achieved through many diverse activities, from simply recycling a spent light bulb to redesigning a production process.

I would like to challenge you to explore the articles in this issue and identify ways your facility can achieve hazardous chemical reductions. It's healthy for your employees, your community and the environment. And, it's almost always good for your bottom line.

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